### **REMARKS**

In response to the final Office Action mailed March 2, 2010, Applicant respectfully requests the Examiner to reconsider the above-captioned Application in view of the foregoing amendments and the following remarks.

## Summary of the Final Office Action

In the final Office Action, Claims 1-4, 7-10, 12 and 14-15 stand rejected by the Examiner. Claims 1-4, 7-10, 12 and 14-15 stand rejected under Section 103(a) as being unpatentable over U.S. Publication No. 2004/0142304 A1 issued to Cottrell ("Cottrell") in view of U.S. Patent No. 5,588,838 issued to Hansson ("Hansson"). Further, Claims 1-4, 7-10, 12 and 14 stand rejected under 35 U.S.C. 112, second paragraph.

### Summary of the Amendment

By this paper, Applicant has amended Claim 1. Accordingly, Claims 1-5, 7-10, 12, and 14-15 are currently pending in the present Application. By this paper, Applicant responds to the Examiner's comments and rejections made in the March 2, 2010 final Office Action. Applicant respectfully submits that the present Application is in condition for allowance.

## The Present Amendment Should Be Entered After Final

Applicant submits that the present Amendment should be entered after the issuance of the final Office Action of March 2, 2010 for the following reasons.

First, Applicant has amended independent Claim 1 to address the rejection under Section 112, second paragraph, in order to place the present Application in better form for appeal. Applicant respectfully submits that these amendments do not introduce new matter or raise new issues because Claim 1 has already been considered by the Examiner. Therefore, Applicant believes that the present Amendment should be entered after final because it simplifies the issues for appeal and does not raise new matter or new issues that would require further consideration or search by the Examiner.

Applicant understands that entry of the present Amendment is not a matter of right; however, Applicant also understands that M.P.E.P. 714.13 indicates that a "refusal to enter the

proposed amendment should not be arbitrary. The proposed amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." Accordingly, Applicant respectfully requests that the Examiner consider and enter the present Amendment.

# In re Rejection under 35 U.S.C. § 112, Second Paragraph

In the Office Action, Claims 1-4, 7-10, 12, and 14 stand rejected under 35 U.S.C. § 112, second paragraph. The Office Action argues that the feature, "the surface," of Claim 1 lacks antecedent basis. Applicant has amended Claim 1 to recite, "an outer surface of the upper portion," to address the issued noted by the Examiner in order to expedite the prosecution of the present Application. This amendment is supported, for example, on page 5, lines 3-4 in the WIPO publication WO2005/055859. Applicant believes that the present rejection is now moot and respectfully requests that the present rejection of Claims 1-4, 7-10, 12, and 14 be withdrawn.

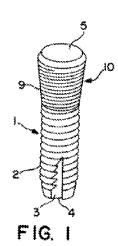
### In re Rejection under 35 U.S.C. § 103(a)

In the Office Action, Claims 1-4, 7-10, 12 and 14-15 stand rejected under Section 103(a) as being unpatentable over Cottrell in view of Hansson. Applicant respectfully traverses this rejection and submits that these claims patentably define over Cottrell and Hansson. Accordingly, Applicant respectfully requests that the rejection of Claim 1, as well as that of Claims 2-3 and 7-10, be withdrawn and that these claims be indicated as allowable over the art of record.

Cottrell is directed to a dental implant fixture "designed to preserve lingual bone by having the coronal aspect of the implant being compatible with the bony anatomy that is higher on the lingual side of the implant surgical site. *See* Cottrell, Abstract. The implant in Cottrell includes micro threads/grooves 46b, as shown in Figure 10 of Cottrell at right. Cottrell indicates that the threads 46b "may further aid in bone preservation and possibly coronal bone apposition." *See* Cottrell, ¶ [0057]. However, Cottrell is devoid of any disclosure or teaching

regarding the cross-sectional shape or profile of the threads/grooves 46b.

Additionally, Hansson is directed to a dental implant fixture that includes a conical flaring outer surface that is provided with "circumferentially oriented, defined mirco-roughness, preferably in the form of threads or beads, having a height between 0.02 and 0.20 mm." *See* Hansson, Abstract. The implant and its threads 9 are shown in Figure 1 at right. Although Hansson discloses possible height ranges for the threads, Hansson is also devoid of any disclosure or teaching regarding the cross-sectional shape or profile of the threads.



In contrast, Claim 1 recites an implant comprising, *inter alia*, a "groove having a cupshaped cross section." Further, Claim 15 recites a method comprising, *inter alia*, installing an implant having a "groove having a cup-shaped cross section." Applicant respectfully submits that neither Cottrell nor Hansson discloses at least the above-noted features of Claims 1 and 15.

Applicant first notes that the Examiner has not argued that any of the art of record discloses a groove having a "cup-shaped cross section." Instead, the Office Action argues, "dental implant's threads or grooves are generally well known to have cup, semi-circular, hyperbola, or semi-elliptical shapes, or rectangular cross section with rounded corners." Applicant traverses this statement, which is an improper attempt to take Official Notice of matter that is not "capable of instant and unquestionable demonstration," as expressly required by M.P.E.P. § 2144.03(A).

Further, "[w]hile 'official notice' may be relied on, these circumstances should be rare when an application is under final rejection. . . . Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known." MPEP § 2144.03(A). Furthermore, "[a]ssertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art." *Id*.

Accordingly, the Office Action's apparent attempt to officially notice that "dental implant's threads or grooves are generally well known to have cup, semi-circular, hyperbola, or

semi-elliptical shapes, or rectangular cross section with rounded corners" would be appreciated by one of ordinary skill in the art is improper as a matter of law. At a minimum, it is improper to make final an Office Action in which the Examiner attempts to take Official Notice.

Applicant notes that proper use of Official Notice requires compliance with several obligations expressly set forth in the Manual of Patent Examining Procedure. The Office Action has failed to meet these obligations. Specifically, the Office has failed to satisfy its obligations under M.P.E.P. § 2144.03. M.P.E.P. § 2144.03(B), for example, expressly requires the Office to provide specific factual findings predicated on sound technical and scientific reasoning to support taking Official Notice. The M.P.E.P. goes on to explain that this means that the Office should present an Applicant with the explicit basis on which Official Notice is based so that the Applicant is able to challenge the assertion in the next reply after the Office action. M.P.E.P. § 2144.03(B). Naked assertions about what is allegedly known in the art, like those noted, cannot satisfy these requirements.

In sum, the Office Action's apparent assertion of Official Notice is improper and traversed. For this reason as well, Applicant respectfully traverses the rejection of Claims 1-4, 7-10, 12 and 14-15. Thus, Applicant requests that the finality of the

Additionally, Applicant respectfully submits that the groove recited in Claim 1 and 15 provides various the specific dimensions and shape of the groove of the implant result in significant benefits. For example, the groove enables the implant to not only stimulate bone movement and bone ingrowth, but also to form a barrier against substantial or visible subsidence of the jaw bone with overlying soft tissue at the area of the jawbone and soft tissue that surrounds the implant. None of the prior art of record discloses the groove of Claims 1 and 15 or that such a groove could provide such advantages.

Therefore, Applicant respectfully submits that Cottrell and Hansson are devoid of any disclosure or other teaching of the above-noted features of Claims 1 and 15 or advantages provided by such arrangements. Further, Applicant respectfully submits that Claims 2-4, 7-10, 12, and 14 are patentable based on their own merit and for at least the reason that these claims depend from an allowable independent base claim. Accordingly, Applicant respectfully requests that the Examiner withdraw the rejection of these claims under Section 102(b) and indicate that these claims are allowable over the art of record.

### No Disclaimers or Disavowals

Although the present communication may include alterations to the application or claims, or characterizations of claim scope or referenced art, Applicant is not conceding in this application that previously pending claims are not patentable over the cited references. Rather, any alterations or characterizations are being made to facilitate expeditious prosecution of this application. Applicant reserves the right to pursue at a later date any previously pending or other broader or narrower claims that capture any subject matter supported by the present disclosure, including subject matter found to be specifically disclaimed herein or by any prior prosecution. Accordingly, reviewers of this or any parent, child or related prosecution history shall not reasonably infer that Applicant has made any disclaimers or disavowals of any subject matter supported by the present application.

### **CONCLUSION**

Applicants respectfully submit that the above rejections and objections have been overcome and that the present Application is now in condition for allowance. Therefore, Applicants respectfully request that the Examiner indicate that Claims 1-5, 7-10, 12, and 14-15 are now acceptable and allowed. Accordingly, early issuance of a Notice of Allowance is most earnestly solicited.

Applicants respectfully submit that the claims are in condition for allowance in view of the above remarks. Any remarks in support of patentability of one claim, however, should not be imputed to any other claim, even if similar terminology is used. Additionally, any remarks referring to only a portion of a claim should not be understood to base patentability on that portion; rather, patentability must rest on each claim taken as a whole. Applicants respectfully traverse each of the Examiner's rejections and each of the Examiner's assertions regarding what the prior art shows or teaches, even if not expressly discussed herein. Although amendments have been made, no acquiescence or estoppel is or should be implied thereby. Rather, the amendments are made only to expedite prosecution of the present Application, and without prejudice to presentation or assertion, in the future, of claims on the subject matter affected thereby. Applicants also have not presented arguments concerning whether the applied references can be properly combined in view of, among other things, the clearly missing elements

noted above, and Applicants reserve the right to later contest whether a proper reason exists to combine these references and to submit indicia of non-obviousness.

The undersigned has made a good faith effort to respond to all of the rejections in the case and to place the claim and drawings in condition for immediate allowance. Nevertheless, if any undeveloped issues remain or if any issues require clarification, the Examiner is respectfully requested to call Applicants' attorney in order to resolve such issue promptly.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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